



BOX AMENDMENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

9-25-01

11/A

Applicant: R.L. Worthington & Stephen J. Brown
Serial No.: 09/163,807
Filing Date: September 30, 1998
Title: DIABETES MANAGEMENT SYSTEM AND METHOD FOR CONTROLLING BLOOD GLUCOSE

Attorney Docket No. HERO-1-1053
(Formerly RYA-118/CIP/CON)
Group Art Unit: 3736
Examiner: Astorino, M.

AMENDMENT UNDER 37 C.F.R. 1.111

TO THE COMMISSIONER FOR PATENTS

Sir:

In the Claims:

Please cancel Claims 1-50

Please add Claims 51-100 as follows:

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51. An apparatus for assisting a patient having diabetes mellitus in controlling blood glucose, said apparatus comprising:

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- a) an input means for entering a blood glucose value $G(t_d)$ representative of a blood glucose concentration of the patient at time t_d and for entering an insulin dose value I_k representative of an insulin dose administered to the patient prior to time t_d ;
 - b) a memory means for storing an insulin sensitivity value representative of an insulin sensitivity of the patient and for storing information for determining an insulin action value $F_k(2_d)$ representative of a fraction of insulin action remaining at time t_d from said insulin dose;
 - c) a processor connected to said input means and said memory means for determining said insulin action value $F_k(t_d)$ and for determining a future blood glucose value $G(t_j)$ representative of an expected blood glucose concentration of the patient at time t_j , wherein said processor determines said future blood glucose value $G(t_j)$ in dependence upon said blood glucose value $G(t_d)$, said insulin dose value I_k , said insulin sensitivity value, and said insulin action value $F_k(t_d)$;
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